



Model #: **VFD220CP4EA-21**

Date: 2020-04-14

| Description | | | | | | | | |
|--|--|--|-------------------------------------|----------------------------------|---------------------------|---|--------------------------|-----------------|
| VFD-CP2000, 25/30HP, 18.5/22Kw, (ND 38/LD 45A), 3 Ø 460VAC, 599.00Hz, (V/Hz, SVC, PM, STO), Pump & Fan Macro, c/w EMI Filter, PLC & BACnet, NEMA 1, Frame B | | | | | | | | |
| Manufacturer | Heavy Duty Output Rating | | Normal Duty Output Rating | | Light Duty Output Rating | | Single Phase Duty Rating | |
| Delta Electronics | HD Input Amps Rating | - | ND Input Amps Rating | 46,5 | LD Input Amps Rating | 55,1 | 1 Ø Input Amps Rating | 46,5 |
| | Rated HP | Rated Amps | HP | Rated Amps | HP | Rated Amps | HP | Amps |
| | - | - | 25,0 | 38,0 | 30,0 | 45,0 | 12,5 | 19,0 |
| Max. Capacity | - | - | 30,0 | 45,6 | 40,0 | 54,0 | 12,5 | 19,0 |
| Line Reactor | Heavy Duty | | Normal Duty | | Light Duty | | 1 Ø Phase | |
| | Line | Load | Line | Load | Line | Load | Line | Load |
| Model | - | - | KDRC1H | KDRD1L | KDRE2H | KDRD2L | KDRC1H | KDRAA5L2 |
| HP Rating | 0,0 | - | 25,0 | 25,00 | 30,00 | 30,00 | 25,00 | 10,00 |
| Max Amps | - | - | 35,0 | 50,0 | 45,0 | 45,0 | 35,0 | 14,0 |
| Inductance uH | - | - | 980,0 | 569 | 850 | 469 | 980 | 1290 |
| Nema 1 Encl.Size | - | - | C2 | C2 | C2 | C2 | C2 | C1 |
| Motor Models Compatible | Heavy Duty | | Normal Duty | | Light Duty | | 1 Ø Phase | |
| | Model | HP | Model | HP | Model | HP | Model | HP |
| | - | - | MQOP-53 | 30 | MQOP-58 | 40 | MQOP-38 | 15 |
| | FLA | - | FLA | 38,0 | FLA | 50,0 | FLA | 20 |
| VFD Dimensions | Width (mm) | Width (in.) | Height (mm) | Height (in.) | Depth (mm) | Depth (in) | Wgt (Kg) | Wgt (lbs) |
| | 250 | 9,8425 | 400 | 15,748 | 210 | 8,2677 | 9,8 | 22,7409 |
| Input Voltage | Input Frequency | Input Phase | Enclosure | | Control Method | V/Hz, Sensorless Vector, Closed Loop Vector, FOC (Field Oriented Control), Torque Control, PM Motor Control | | |
| 340 ~ 480VAC (± 10%) | 50/60Hz (±5%) | 3 | NEMA 1 | | | | | |
| Regulated Output Voltage | Efficiency | Motor Current Protection Range | Stall Prevention Level HD | Stall Prevention Level ND | Stall Prevention Level LD | Carrier Frequency | Accel / Decel Time | Default Rating |
| 0.0 ~ 510.0Vac | ≥96.5% | 5.40 ~ 54.0 A | - | 0 ~ 160% | 0 ~ 130% | 2 ~ 10kHz | 0.0 ~ 6000 secs | Light Duty |
| Over Torque Level | DC Injection | Braking Chopper | Equivalent Braking Resistor Circuit | Minimum Braking Resistance Value | Starting Torque @ | | | |
| 10 ~ 200% | 0 ~ 100.0 % | Built-in | 3000W 26Ω | 23 Ω | V/Hz | SVC | VC+PG | |
| | | | | | 0 ~ 150% @ 0.5Hz | 0 ~ 150% @ 0.5Hz | | |
| Analog Inputs | | | Analog Outputs | | | Keypad | Fault Record | Reel Time Stamp |
| AVI | ACI | AUI | AFM1 | AFM2 | DFM | | | |
| 0 ~ 10vdc | 0/4 ~ 20ma | -10 ~ +10vdc | 0 ~ 10vdc / 0 ~20ma | 0 ~ 10vdc / 0 ~20ma | Pulsed Frequency | Removable | 20 last faults | Yes |
| Digital Inputs | | | | | Signal mode | | | |
| Dedicated | | Safe Torque Off | Programmable | Control Voltage | | | | |
| Fwd, Rev, STO1, STO2 | | Yes | 8 | 24vdc | Sink (NPN) / Source (PNP) | | | |
| Digital Outputs | | | | Built in Controllers | | | | |
| DO1 | DO2 | DO3 | DO4 | Preset speeds | Process Control | PLC | PID | Position |
| 1NO/NC Form C relay, ≤ 240VAC, ≤ 24vdc | 1NO/NC Form C relay, ≤ 240VAC, ≤ 24vdc | Optocoupler NPN ≤ 48vdc | Optocoupler NPN ≤ 48vdc | 15 | Thru PLC | 10K Steps | Yes | - |
| Communication | | | | Built In Protocol 1 | Built In Protocol 2 | Built In Protocol 3 | | |
| Comm Port 1 | Comm Port 2 | Comm port 3 | Comm port 4 | | | | | |
| RJ45 (RS-485) | RJ45 (RS-485) | -SG, +SG (RS-485) | - | Modbus ACSII | Modbus RTU | BACnet | | |
| Options | | | | | | | | |
| Option 1 | KPC-CC01 | Standard keypad shipped with C2000 series. Also compatible, MS-300 & MH-300. | | | | | | |
| Option 2 | MKC-KPPK | VFD-C2000, Keypad Remote Panel Adapter, IP66 | | | | | | |
| Option 3 | KPC-CE01 | VFD-C2000, LED English Keypad for C2000 | | | | | | |
| Option 4 | - | - | | | | | | |
| Option 5 | CMC-EIP01 | VFD-C2000, Ethernet Communication card, supports EtherNet/IP protocol | | | | | | |
| Option 6 | CMC-MOD01 | VFD-C2000, Ethernet communication card, supports MODBUS TCP protocol | | | | | | |
| Option 7 | CMC-DN01 | VFD-C2000, DeviceNet communication card, 125kbps / 250kbps / 500kbps | | | | | | |
| Option 8 | CMC-PD01 | VFD-C2000, PROFIBUS-DP communication card, 9.6kbps-12Mbps | | | | | | |
| Option 9 | EMC-COP01 | VFD-C2000, CANopen communication card, 50kbps - 1Mbps | | | | | | |
| Option 10 | EMC-D42A | VFD-C2000, IO Extension card, (4DI/2DO), DC 24V | | | | | | |
| Option 11 | EMC-D611A | VFD-C2000, 6DI extension card, AC 110V power | | | | | | |
| Option 12 | EMC-BPS01 | VFD-C2000, 24VDC External Power Supply Card | | | | | | |
| Option 13 | EMC-R6AA | VFD-C2000, IO Extension card (6 output relays) | | | | | | |
| Option 14 | - | - | | | | | | |
| Option 15 | - | - | | | | | | |
| Option 16 | - | - | | | | | | |
| Option 17 | - | - | | | | | | |
| Option 18 | - | - | | | | | | |